

TITLE

SULFUR TRIOXIDE DELIVERY SYSTEM

ABSTRACT OF THE DISCLOSURE

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- A process for reversible sorption of sulfur trioxide onto a sorbent comprising a) contacting from about 15% to 100% sulfur trioxide with the sorbent under anhydrous conditions at a temperature of from about 35°C to about 150°C thereby sorbing the sulfur trioxide onto the sorbent, b) desorbing sulfur trioxide from the sorbent at a temperature of from about 150°C to about 350°C at about atmospheric pressure, or under a vacuum pressure, and c) recycling said sorbent by continuously repeating steps a) and b), wherein said sorbent consists essentially of silica or zeolite having a silicon to aluminum ratio in the ranges of from about 1 to about 4.4 or greater than about 5.1, and having a pore size of at least 0.5 nm is disclosed.